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Conference Abstract

Mapping across Standards to Calculate the MIDS Level of Digitisation of Natural Science Collections

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Abstract

The Minimum Information about a Digital Specimen (MIDS) standard is being developed within Biodiversity Information Standards (TDWG) to provide a framework for organisations, communities and infrastructures to define, measure, monitor and prioritise the digitisation of specimen data to achieve increased accessibility and scientific use. MIDS levels indicate different levels of completeness in digitisation and range from Level 0: not yet meeting minimal required information needs for scientific use to Level 3: fulfilling the requirements for Digital Extended Specimens (Hardisty et al. 2022) by inclusion of persistent identifiers (PIDs) that connect the specimen with derived and related data. MIDS Levels 0–2 are generic for all specimens. From MIDS Level 2 onwards we make a distinction between biological, geological and palaeontological specimens. While MIDS

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represents a minimum specification, defining and publishing more extensive sets of information elements (extensions) is readily feasible and explicitly recommended.

The MIDS level of a digital specimen can be calculated based on the availability of certain information elements. The MIDS standard applies to published data. The ability to map from, to and between TDWG standards is key to being able to measure the MIDS level of the digitised specimen(s). Each MIDS term is being mapped across TDWG standards involving Darwin Core (DwC), the Access to Biological Collections Data (ABCD) Schema and Latimer Core (LtC, Woodburn et al. 2022), using mapping properties provided by the Simple Knowledge Organization System (SKOS) ontology.

In this presentation, we will show selected case studies that demonstrate the implementation of the MIDS standard supplemented by MIDS mappings to ABCD, to LtC, and to the Distributed System of Scientific Collections' (DISSCo) Open Digital Specimen specification. The studies show the mapping exercise in practice, with the aim of enabling fully automated and accurate calculations. To provide a reliable indicator for the level of digitisation completeness, it is important that calculations are done consistently in all implementations.

Keywords

digitization, DiSSCo, MOBILISE, SYNTHESYS+, ICEDIG, minimum information standards, digital specimen

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Conflicts of interest

The authors have declared that no competing interests exist.

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